

REGULAR ORIGINAL FILING

Application Based on

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Inventors: Laura R. Whitby and Lisa W. Jaffe

Customer No. 01333

**A DOCKING STATION ASSEMBLY FOR TRANSMITTING  
DIGITAL FILES**

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**A DOCKING STATION ASSEMBLY FOR TRANSMITTING DIGITAL  
FILES**

**FIELD OF THE INVENTION**

5           The present invention relates to docking stations for digital cameras and, more particularly, to such docking stations having a replaceable insert for permitting docking of a plurality of cameras.

**BACKGROUND OF THE INVENTION**

10           Currently known and utilized docking stations for digital cameras include a base portion into which the camera is inserted for downloading images and the like to a personal computer. The docking station further includes an electrical connector which is connected to the personal computer for transmitting the digital images to the computer.

15           Although the currently known and utilized docking station is satisfactory, it includes drawbacks. Such prior art docking stations only permit one model of camera to be inserted into a particular docking station. Consequently, a user must purchase a new docking station for each camera. Obviously, this is not cost efficient.

20           Consequently, a need exists for a docking station which permits multiple models of cameras to be inserted therein.

**SUMMARY OF THE INVENTION**

25           The present invention is directed to overcoming one or more of the problems set forth above. Briefly summarized, according to one aspect of the present invention, the present invention resides in a docking station assembly for transmitting digital images, the docking station assembly comprising: a) a housing for forming an enclosure for the docking station assembly and said housing includes an insert-receiving portion for receiving any of a plurality of removable  
30           and replaceable inserts; and b) a removable and replaceable insert having a

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docking mating portion which mates with the insert-receiving portion, and having a camera mating portion having a shape of a portion of a particular electronic device.

5                    These and other aspects, objects, features and advantages of the present invention will be more clearly understood and appreciated from a review of the following detailed description of the preferred embodiments and appended claims, and by reference to the accompanying drawings.

10    **Advantageous Effect Of The Invention**

                    The present invention has the advantage of permitting a plurality of digital cameras to use a single docking station.

**BRIEF DESCRIPTION OF THE DRAWINGS**

15                    Fig. 1 is a perspective view of a docking station of the present invention;

                    Fig. 2 is a perspective view of an insert of the present invention that is attached to the docking station of Fig. 1;

                    Fig. 3 is a perspective view of a second insert of the present  
20    invention that is also attachable to the docking station of Fig. 1; and

                    Fig. 4 is a perspective view of the insert installed in the docking station.

**DETAILED DESCRIPTION OF THE INVENTION**

25                    In the following description, the present invention will be described in the preferred embodiment as a software program. Those skilled in the art will readily recognize that the equivalent of such software may also be constructed in hardware.

                    Referring to Fig. 1, there is shown a docking station 10 of the  
30    present invention. The docking station 10 includes a base portion 20 for

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permitting the docking station 10 to be placed on suitable objects, such as a desk and the like. The docking station 10 further includes an upper enclosing portion 30 attached to the base portion 20 which upper portion 30, in combination with the base portion, forms an enclosure for the docking station 10. As is well-known to those skilled in the art, the docking station 10 includes electronic components in the interior of the enclosure formed by the base 20 and upper enclosing portion 30 for permitting transmission of digital images to a personal computer (not shown). This transmission may be directed by any suitable software program, such as Kodak Picture Software™ available in EasyShare™ products from Eastman Kodak Company, which software may be installed on the personal computer.

The upper enclosing portion 30 includes a notched-out, elongated indentation portion 40 for receiving a replaceable insert (not shown in Fig. 1). It is instructive to note that the indentation portion 40 may receive any of a plurality of inserts, each insert receives a particular digital camera. This permits the docking station to be flexible and cost-efficient in that it can receive a plurality of digital cameras 32. The upper enclosing portion 30 further includes a electrical connector 35 which matingly connects to a portion of the digital camera for permitting electrical signal transmission between the camera 32 and the docking station 10. A finger insert 85 is disposed in the upper portion 30 for permitting insertion of the user's finger for easily removing the insert without any tools. Two recessed portions 45 are also positioned on the upper portion 30 for mating with tabs (described below) for securing fit of the docking station 10 and the insert.

A transmit button 50 is disposed in the upper enclosing portion 30 for permitting a user to initiate transmission of the images by pressing the button 50. A light 60 is included on the upper enclosing portion 30 for indicating charging of the camera. It is instructive to note that charging is automatically initiated upon insertion of the digital camera 32. Such charging techniques are well-known in the art and will not be discussed in detail herein. The base portion

30 also includes an electrical connecting portion 70 for receiving an electrical cable which is connected to the personal computer. A power cable 80 is also attached to the base portion 20 which power cable 80 is connected to an electrical outlet (not shown) for supplying electrical power to the docking station 10.

5 Referring to Fig. 2, there is shown the replaceable insert 90 of the present invention. The insert 90 includes a bottom portion 100 (not shown in its entirety) having a shape that substantially conforms to the shape of the indentation 40 of the docking station 10 for permitting the insert 90 to be matingly received by the docking station 10. The insert 90 includes an upper portion 110 having a  
10 contoured-shape portion 120 which conforms substantially to the shape of a mating portion of the particular camera 32 to which it will be mated. It is instructive to note that the docking station 10 permits a plurality of inserts to be inserted therein all of which mate to the indentation portion 40.

The insert further includes a cut-away portion 95 for permitting the  
15 electrical connection 35 of the docking station 10 to pass therethrough when installed on the docking station 10. Two stabilizing elements 105 are disposed on the floor of the insert 90 for stabilizing the connection of the camera 32 to the insert 90. Positioning tabs 108 are disposed around the peripheral portion of the insert 90 for securing the fit of the insert 90 to the docking station 10. It is  
20 instructive to note that the tab 108a mates with the finger inset 85, and the tabs 108b and 108c respectively mate with the recesses 45. The embodiment shown in Fig. 2 is an example of one of the plurality of inserts. Fig. 3 illustrates another example of an insert 90 having the same components as discussed above. It is to be noted, however, that the contoured-shape portion 120 has a different shape  
25 from the previously discussed insert 90 for permitting reception of a different camera 32.

Referring to Fig. 4, and for clarity of understanding, there is shown the insert 90 matingly placed in the docking station 10. As is obvious from the illustration, the docking station 10 and insert 90 mate together in an integrated  
30 manner.

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Although the preferred embodiment illustrates a digital camera, it is instructive to note that multi-media devices, such as MP3™ players, personal digital assistants, or other electronic devices, may be installed in lieu of the digital camera. Still further, wireless devices may also be substituted for the digital  
5 camera. In this case, the electrical connection 35 is deleted and substituted with an RF receiver.

The invention has been described with reference to a preferred embodiment. However, it will be appreciated that variations and modifications  
10 can be effected by a person of ordinary skill in the art without departing from the scope of the invention.

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**PARTS LIST**

- 10 DOCKING STATION
- 20 BASE PORTION
- 30 UPPER ENCLOSING PORTION
- 32 DIGITAL CAMERA
- 35 ELECTRICAL CONNECTOR
- 40 INDENTATION PORTION
- 45 RECESSED PORTION
- 50 TRANSMIT PORTION
- 60 LIGHT
- 70 ELECTRICAL CONNECTING PORTION
- 80 POWER CABLE
- 85 FINGER INSERT
- 90 REPLACABLE INSERT
- 105 STABILIZING ELEMENT
- 108 TABS
- 110 UPPER PORTION
- 120 CONTOURED-SHAPED PORTION

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